AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A cryostorage device comprising:

at least one data storage device including at least one data storage adapted to store a plurality of data, and

at least one sample receptacle device with at least one sample chamber for the uptake of a suspension sample, the at least one sample chamber being directly attached to the at least one data storage device and having an elongated, hollow shape that extends from an inlet end over a predetermined length to an outlet end, the at least one sample chamber being made of an inherently flexible and bendable material, and the at least one sample chamber being attached to the at least one data storage device in a flexible and movably hanging manner.

2. (Previously Presented) The cryostorage device according to claim 1, wherein the at least one sample chamber is a hollow cylinder, a hollow cone, a pipe, a tube, or a hollow needle.

3. (Previously Presented) The cryostorage device according claim 1, wherein the at least one sample chamber consists of a flexible, bendable material.

4. (Previously Presented) The cryostorage device according to claim 1, wherein the at least one sample chamber is provided with at least one of a sensor, a temperature sensor, and cooling surfaces.

5. (Previously Presented) The cryostorage device according to claim 1, wherein the at least one data storage device comprises at least one data storage with a housing, the housing being connected with the at least one sample receptacle device.

6. (Previously Presented) The cryostorage device according to claim 5, wherein the at least one data storage device comprises a multiplicity of data storages that are attached along the length of the at least one sample chamber.

7. (Previously Presented) The cryostorage device according to claim 1, wherein a cross-sectional dimension of the at least one sample chamber varies along a length of the at least one sample chamber, so that at least one sub-chamber with a cross-sectional dimension that is larger than cross-sectional dimensions of the inlet and outlet openings is provided.

8. (Previously Presented) The cryostorage device according to claim 1, wherein the at least one sample receptacle device comprises a plurality of sample chambers connected with one another at their exterior walls, so that an integral, flexible sample chamber block is provided.

9. (Previously Presented) The cryostorage device according to claim 1, wherein a labeling device is provided that comprises at least one of a labeling layer on the at least one data storage device and labeling elements placed on the at least one sample receptacle device.

10. (Previously Presented) The cryostorage device according to claim 1, wherein an attachment device is provided, with which the at least one sample chamber is attached to the at least one data storage device.

11. (Previously Presented) The cryostorage device according to claim 10, wherein the attachment device comprises strips arranged individually or as a bundle, each of the strips having a first and a second end with a sample chamber attached to the first end and the at least one data storage device attached to the second end.

12. (Previously Presented) A method for storing at least one suspension sample in a low-temperature state, comprising the steps of:

uptaking the at least one suspension sample in at least one sample chamber of a cryostorage device, the cryostorage device having at least one data storage device including at least one data storage adapted to store a plurality of data, and at least one sample receptacle device with at least one sample chamber for the uptake of a suspension sample, the at least one sample chamber being directly attached to the at least one data storage device and having an elongated, hollow shape that extends from an inlet end over a predetermined length to an outlet end, the at least one sample chamber being made of an inherently flexible and bendable material, and the at least one sample chamber being attached to the at least one data storage device in a flexible and movably hanging manner; and

transferring the at least one suspension sample into a low-temperature state by positioning at least a part of the cryostorage device in a cryo-medium.

13. (Previously Presented) The method according to claim 12, wherein the uptaking comprises dipping the at least one sample chamber with an inlet end in a sample reservoir and transferring of the suspension sample as a result of a reduced pressure applied at a corresponding outlet end or of capillary forces.

14. (Previously Presented) The method according to claim 12, wherein data that comprise the identification of the at least one suspension sample, measured data that were obtained from the suspension sample, reference data of reference samples, and behavior data about properties of the suspension sample during storage in the low-temperature state are stored in the at least one data storage device.

15. (Previously Presented) The method according to claim 12, wherein at least one partial sample is detached from the at least one sample chamber in the low-temperature state by mechanical separation.

16. (Previously Presented) The method according to claim 15, wherein during the mechanical separation a local heating of the respective sample chamber in a vicinity of the at least one partial sample that is to be separated or a separation at an attachment device between the respective sample chamber and the data storage device occurs.

17. (Previously Presented) The method according to claim 12, wherein at least one of the inlet and outlet ends of the at least one sample chamber is sealed by clamping, plugging, sealing, or a part of the at least one suspension sample.

18. (Previously Presented) The method according to claim 12, wherein the step of transferring the at least one suspension sample into a low-temperature state includes arranging the cryostorage device in an environment with a reduced temperature of less than -100 ° Celsius.

19. (Previously Presented) The method according to Claim 12, wherein the step of transferring the at least one suspension sample into a low-temperature state includes arranging both the at least one data storage device and the at least one sample receptacle

device in an environment with a reduced temperature of below -100°C.

20. (Previously Presented) A cryostorage device comprising:

at least one data storage device including at least one data storage adapted to store a plurality of data, and

at least one sample receptacle device with at least one sample chamber for the uptake of a suspension sample, the at least one sample chamber being directly attached to the at least one data storage device and having an elongated, hollow shape that extends from an inlet end over a predetermined length to an outlet end, both the at least one sample receptacle device and the data storage device being adapted to be transferred to an environment with reduced temperature below minus 100° Celsius,

the at least one sample chamber being made of an inherently flexible and bendable material, and

the at least one sample chamber being attached to the at least one data storage device in a flexible and movably hanging manner.

21 (New) The cryostorage device according to Claim 1, wherein the at least one data storage is at least one data memory chip.

22 (New) The method according to Claim 12, wherein the at least one data storage is at least one data memory chip.

23 (New) The cryostorage device according to Claim 20, wherein the at least one data storage is at least one data memory chip.

24 (New) The cryostorage device according to Claim 1, wherein the plurality of data includes a plurality of data bits.

25 (New) The method according to Claim 12, wherein the plurality of data includes a plurality of data bits.

26 (New) The cryostorage device according to Claim 20, wherein the plurality of data includes a plurality of data bits.